

KOREA

It has become apparent . . . that during the between-wars interim we have lost, through neglect, disinterest and possibly jealousy, much of the effectiveness in intelligence work that we acquired so painfully in World War II. Today, our intelligence operations in Korea have not yet approached the standards that we reached in the final year of the last war.

General A. James Van Fleet, Commanding General 8th Army, June 1952

The Country

American intelligence interest and attention, so painfully refocused on the Soviet threat after World War II, were not to be rewarded. The next war occurred not in Europe, where allies and commitments were, but in Korea, a remote Asian peninsula whose name many Americans had never heard in 1950.

Korea had, throughout its recorded history, been a battleground between China, Japan, and Russia. Frequently invaded and occupied, its primary purpose seemed to be as a strategic buffer among three conflicting imperial ambitions. The most recent change of ownership had come after the Russo-Japanese War of 1904-05. Russia, the loser, was forced to cede its influence. Korea became forcibly Japanese.

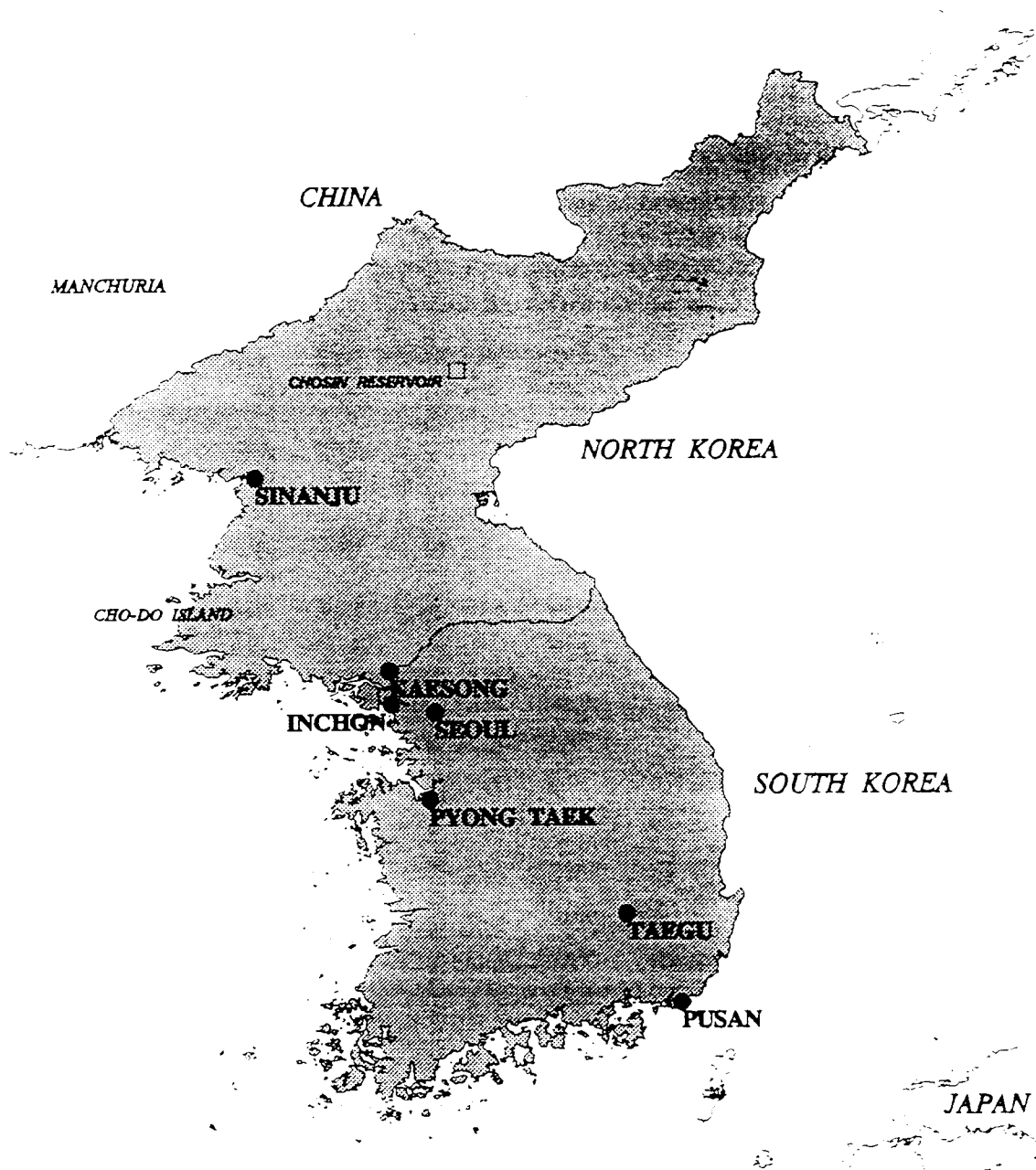
The Allied powers recognized during World War II that Korea was one of those geopolitical oddities whose status had to be resolved. It obviously could not remain Japanese, and so at the Cairo Conference of 1943 Roosevelt endorsed a policy that would ensure a "free and independent Korea." At Yalta in April of 1945, the Big Three (the United States, the USSR, and Britain) agreed to an Allied trusteeship, to be administered by the three plus China.

Nothing further happened until the USSR declared war on Japan on 8 August 1945, simultaneously invading Manchuria and Korea. The sudden movement of Soviet troops onto the peninsula appeared to portend Soviet occupation, and MacArthur was directed to rush troops to the southern end of Korea. The United States proposed a division of military occupation on the 38th Parallel, splitting the peninsula roughly in half. Moscow unexpectedly agreed, and still more unexpectedly, complied.

American forces dwindled down to about 30,000 by 1948. In March of that year President Harry Truman, following the country's mood of dedicated military budget-cutting, decided that America would simply have to abandon Korea to the United Nations,

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to sink or swim on its own. He decided to end the American trusteeship and sponsor free elections. So in the spring of 1948 American forces marched out of Korea. The South boycotted the elections, which led to a new National Assembly and a government headed by Syngman Rhee, a seventy-three-year-old militant anti-Communist who had spent forty years in exile in the United States waiting for the liberation of his homeland. The North formed its own government, the Democratic People's Republic of Korea (DPRK), headed by a young thirty-six-year-old Communist named Kim Il-sung. The peninsula was divided at the waist.



Syngman Rhee



Kim Il-sung

The Asia Dilemma

In 1949 catastrophe struck in the Far East. The corrupt and despotic Chiang Kai-shek and his Nationalists were ousted by the Communist forces of Mao Tse-tung. As the Communists marched into Beijing, Chiang fled to the island of Formosa (Taiwan), some 100 miles off the coast, followed by as much of his army as could flee with him. By the end of the year, Mao was making confident proclamations about his intent to invade Formosa and drive Chiang and his army into the sea.

In Washington, the administration was convulsed over whether the United States should support Chiang and the Nationalists. In the end the anti-Chiang faction won, and Truman, on 5 January 1950, issued a public statement that the United States had adopted a "hands off Formosa" policy. Ambiguity about which side of the line Korea stood on was

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resolved a week later when Secretary of State Dean Acheson, at a press conference, described an American sphere of interest in the Pacific that implicitly excluded Korea.

By June 1950 the United States had boxed itself into a very weak position in Korea. From a full army corps, it was reduced to a 500-man Korean Military Aid Group (KMAG). The U.S. had left behind plans and equipment for a 50,000-man ROK (Republic of Korea) "constabulary" (rather than a real army) but devoid of heavy equipment, as the U.S. was afraid that the militant Rhee would use it to invade the North. Rhee drew up plans for a real army of 100,000, and he succeeded in extracting additional American commitments of weapons (but still no heavy, mobile offensive weapons). On the other side of the 38th Parallel stood a DPRK army and air force of about 135,000 men, equipped by the Soviets with much of the heavy equipment that the Americans had denied to Rhee.

American military forces, overall, in 1950 were in a weakened state. Defense budgets had continued to decline from their World War II peak, and the defense budget for 1950 was only \$12.3 billion, with an authorized Army strength of 630,000 (but an actual strength of only 591,000). Of these, only 108,500 were in the Far East, almost all of them in Japan. In line with administration policy, the Pentagon had no plans to defend Korea and no one there to do it. The American contingency plan for the peninsula was basically to evacuate all dependents to Japan.

Parallel to the national lack of interest in Korea was AFSA's neglect of the problem. There were no documented high-priority national intelligence requirements on Korea, and the only requirement that related at all was couched in terms of keeping track of Soviet interest in the peninsula. At the time AFSA had "no person or group of persons working on a North Korean problem." During the previous year, SCA intercept sites had stumbled onto [REDACTED] North Korean messages which were originally collected as suspected [REDACTED]. When in May 1949 these messages were identified as North Korean, two intercept positions at [REDACTED] and a tactical unit not under AFSA control, were tasked with follow-up copy. AFSA had no Korean linguists, no Korean dictionaries, no traffic analytic aids, and no Korean typewriters.

No one really expected an invasion in Korea. There was fragmentary HUMINT reporting, generally disbelieved by all, that there could be an invasion by North Korea in 1950. In March an Army organization called the Intelligence Indications Steering Committee cited the possibility of military activity in Korea sometime in 1950. But this was set against a general disbelief in the intelligence community that Korea presented a real problem.

After the war broke out, there was the usual scramble by intelligence agencies to find the indicators that had been missed. AFSA, for instance, discovered traffic indicating that there had been large shipments of medical supplies going from the USSR to Korea beginning in February. A Soviet [REDACTED] net in the Vladivostok area had undergone a

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dramatic switch to South Korean DF tasks beginning in February. This did not quiet the critics.

The Invasion

About 0330 on Sunday morning, 25 June 1950, Captain Joseph Darrigo, a KMAG military advisor to the ROK posted near Kaesong, was jarred awake by the roar of artillery. Darrigo, the only American on the 38th Parallel, was in the middle of an invasion of North Korean ground forces into South Korea. He managed to make it to the ROK 1st Division headquarters at Munsan just ahead of the advancing North Korean forces, and he spread the alarm.

There appears to have been no tactical intelligence warning. A reporter in Seoul got word of an invasion and rushed to the American embassy for confirmation. At the same time that he got off a wire to New York, the American ambassador was cabling Washington. His cable had to be encrypted and decrypted, and it got there late. The Americans learned of the invasion from the reporter in Seoul.

ASA decided to support the fighting with a communications reconnaissance battalion at Army level and three battalions to serve each of the three corps. The 60th Signal Service Company at Fort Lewis, Washington, appeared to be closest to being ready for deployment of any ASA tactical asset, so that organization was selected. But it took time to get ready, and in the meantime ASA Pacific (ASAPAC) in Hawaii rushed a signal collection unit to the Korean peninsula, arriving there on 18 September. The Fort Lewis unit did not arrive until 9 October.

Meanwhile, the Truman administration had decided to help the fledgling ROK army and got UN backing for the deployment of a multinational defensive force to Korea. Truman directed MacArthur to rush the 8th Army from Japan to Korea, and the first American troops reentered Korea by air on 1 July. But it took time to get enough troops into the country, and the DPRK army charged ahead, pushing ROK defensive units ahead of it pell-mell. By mid-August, ROK defenders had been shoved into a perimeter around the port city of Pusan, the last remaining large city still under the control of the Rhee government. When the first ASA unit arrived in September, the ROK army, bolstered by newly arrived American divisions (the 24th Infantry, 25th Infantry and 1st Cavalry), was desperately hanging onto this slice of the Korean landmass, and the American and Korean defenders were in the middle of a fierce struggle to retain the town of Taegu.

ASA's primary concern was to get linguists. Perhaps the only two first-rate Army Korean linguists were Y.P. Kim and Richard Chun, who were both instructors at the Army Language School in Monterey in 1950. Chun had been cleared in World War II, but Kim had never been in the COMINT business. ASA needed linguists at Monterey to train what was expected to be a sudden flood of Korean language students, but they also needed someone in Korea who could translate Korean. ASA hesitated just a brief moment, and

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then Kim and Chun, neither as yet actually cleared for COMINT, were on their way to Korea to assist the newly arrived ASA tactical COMINT unit. Until their clearances came through, they worked in a locked and guarded room every day. Intercepted messages were brought in periodically. They would translate the traffic and then pass it through a slot in the wall to the communications center.

The Air Force Security Service likewise had one unit in the Korean area in 1950 - the 1st Radio Squadron Mobile (RSM) at Johnson Air Force Base outside Tokyo. This unit had been created in 1942, and it had supported 5th Air Force through MacArthur's Pacific campaign from New Guinea to Japan. In 1950 it was still engaged in support to 5th Air Force, but by then had changed its mission to [REDACTED]. In late June it scrambled to change over to Korean targets. It had no cryptanalytic capability, and so began with a traffic analytic attack against North Korean air targets. It likewise had no cleared Korean linguists, so it could do little [REDACTED].

The Murray Mission

The Air Force Security Service actually beat ASA to Korea - their first representative, First Lieutenant Edward Murray, arrived in Taegu on 19 July. But Murray's mission quickly became entangled in one of the most bizzare incidents in the history of American cryptology.

When Murray arrived, 5th Air Force already had a COMINT service. The origins of that organization are very murky but appear to go back to the days after the end of World War II. At the time a civilian named Nichols, who also had a reserve commission as an Air Force major, headed the local Air Force Office of Special Investigations. Nichols, whose background and training in COMINT are completely unknown, decided that Korea needed a COMINT service. The South Korean government under Syngman Rhee did not appear interested, so Nichols proceeded on his own, seeking out the assistance of some Koreans with COMINT experience.

Among his recruits was one Cho Yong Il, who had come from North Korea, where he had been a radio operator and cryptanalyst with the North Korean Army. Joining Cho was Kim Se Won, a captain in the ROK navy. Kim had served as a COMINTER with the Japanese army in World War II and, owing to having been interned by the U.S. Army in Hawaii, spoke excellent English. Cho, Kim, and those who worked for them did intercept and translation work for Nichols; the source of funding has never been discovered. In 1949 Cho, with Nichols's assistance, obtained a commission in the Korean air force (ROKAF), and his group dual-hatted as a private group working for Nichols and as the ROKAF COMINT service. At about the same time the ROK navy set up Kim and some colleagues from the Nichols group as their COMINT service, so they, too, were dual-hatted.

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When the ROK army retreated south in July of 1950, Nichols and his COMINT group retreated with them. As they fled south, fissures developed between Cho and Kim, and in late July or early August the Kim group seceded. Cho stayed with Nichols to supply COMINT to the Air Force, while Kim eventually hooked up with ASA units entering Korea. Nichols was reporting directly to 5th Air Force, which was releasing his reports into USAF intelligence channels [REDACTED]

Meanwhile, AFSS had sent Murray to Johnson Air Force Base to put together a direct support package. Murray assembled some vans and other equipment from 1st RSM, and on 15 July he flew to Korea to set up a mobile COMINT effort. AFSS was operating under a misty-eyed concept of COMINT as covert operations, and 1st RSM was directed to expunge its identifications from the equipment, and to insure that Murray could not be indentified as a COMINTER. The direct support went under the codename Project WILLY.

Murray's first concern on arriving in Korea was linguists. Fifth Air Force offered him eight of them, straight from the Nichols pool. The only problem was that Nichols still controlled them, and the upshot was that Nichols wound up with 1st RSM's equipment for use by his own operators. As for 5th Air Force, they were quite happy with the support they were getting from Nichols and informed Murray that he was no longer needed. First Lieutenant Murray returned to Japan on 1 August, having utterly failed to set up a Security Service unit in Korea and having lost his equipment to boot.

The breathless nature of Nichols's coup left USAFSS spinning. A severe jurisdictional battle ensued, encompassing command organizations in the United States, Japan, and Korea. Security Service appeared to carry the day, and Murray was ordered back to Korea on 12 August, armed with a letter of authority from General Banfill (Deputy for Intelligence, Far East Air Force). But the struggle was far from over. Nichols was still unwilling to relinquish control of his COMINT organization, and he had the backing of 5th Air Force. Nichols was a local asset under their complete control, was publishing COMINT without the restrictive codewords that limited dissemination, and already had the expertise that Murray lacked. On 17 August, 5th Air Force ordered Murray to catch the next plane out of Korea. AFSS was again out of the picture.

The Nichols effort was limited by its lack of national-level technical support from AFSA and USAFSS, and 5th Air Force eventually realized this. On 20 November, 5th Air Force reversed its earlier position and asked for the deployment of a radio squadron mobile to Korea to provide support. Cho's group became Detachment 3 of the 1st RSM, and Nichols disappeared from the scene.

Meanwhile, back in Tokyo 1st RSM was trying to mobilize an effort against the North Korean air force. When Murray returned to Japan the first time he carried with him some captured North Korean code books turned over to him by Nichols. Lacking Korean translators, the unit came upon a Catholic priest named Father Harold Henry, who had spent a number of years in Korea as an Army chaplain. AFSS agreed to give him access to

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intercepted materials but did not agree to give him an SI clearance. He began applying the code books to the traffic, and he turned out to be a pretty good cryptanalyst, even though he was doing the work without benefit of formal clearance. Father Henry produced the first decrypts of enciphered North Korean air traffic. ■■■

Counterattack

While ASA and AFSS were having trouble getting organized tactically, AFSA pushed rapidly ahead. ■■■

At the time, DPRK troops were being readied for their all-out assault on Taegu, which, if successful, might have caused the collapse of the Pusan perimeter and American defeat. Three divisions of Lieutenant General Walton Walker's 8th Army were on line with the remnants of five ROK divisions; opposing them were fourteen battle-tested DPRK infantry divisions. On 26 July ■■■ contained much of the battle plan for the assault on the 30th. The information reached Walker on the 29th, and he shifted his forces to meet the attack, thus saving Taegu and the Pusan perimeter. ■■■

On 15 September MacArthur launched the spectacular Inchon invasion, the second largest amphibious landing in history, near Seoul. North Korean troops suddenly had a large American force in the rear of their operations. On 19 September 8th Army began its breakout from the Pusan perimeter, and in a brief month they had pushed DPRK forces back north of Seoul. Syngman Rhee's government formally returned to the capital on 29 September. But the dynamic and committed Rhee wanted to push the fighting into North Korea, and on 30 September, ROK troops crossed the 38th Parallel. Washington viewed this development with anxiety. But MacArthur was confident that Chinese and Soviet forces would not intervene and, like Rhee, lobbied for authority to go all the way to the Yalu River. The CIA issued an assessment that MacArthur was right. The risks of invading North Korea appeared minimal, and in the end the Truman administration backed MacArthur. American forces crossed the 38th Parallel on 9 October, heading north.

China

The Chinese problem which MacArthur was so blithely underestimating had been building for years. The postwar COMINT effort against Chinese communications began officially in 1945 during the mission of General George Marshall to try to get Chiang Kai-shek and Mao Tse-tung to the bargaining table. Marshall, familiar with what COMINT had

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done during World War II, requested COMINT information from both Communist and Nationalist communications.

ASA mounted a small effort against both the Nationalists and Communists. [REDACTED] ASA could still report that the two sides were far apart, and it was obvious from the COMINT traffic that they were determined to settle their differences on the battlefield. The Marshall mission was withdrawn in 1946, and in October of 1949 Mao triumphed.

Following the withdrawal of the Marshall mission, the COMINT mission against China suffered, as ASA employed all available resources against the Soviet target. [REDACTED]

ASA kept only a small section against Chinese civil communications, [REDACTED]
Collection resources were concentrated at [REDACTED]

When American and South Korean troops crossed the 38th Parallel, the Chinese had already decided to intervene in North Korea. The decision was taken at a meeting in Beijing from 3 to 7 October 1950. On the first day of the conference, Chinese foreign minister Chou En-Lai called Indian ambassador Panikkar to tell him of the decision, and Panikkar relayed this news to the West. But Indians were regarded as pathologically left-leaning, and Panikkar's communique was disbelieved. Chou's warning was followed up by Chinese radio broadcasts, but these, too, were disregarded.

Historian Clay Blair asserts that "when MacArthur returned to Tokyo from Wake Island [in mid-October] he had no inkling of the CCF armies gathering in North Korea." This was wrong. AFSA had clear and convincing evidence of the massing of Chinese troops north of the Yalu and had published it in product reports available to the JCS, the White House, and to MacArthur. As early as July, AFSA began noting references in Chinese civil communications to army units moving north. Rail hubs in central China were jammed with soldiers on their way to Manchuria. By September AFSA had identified six of the nine field armies that were later involved in the fighting in North Korea and had located them in Manchuria, near the Korean border. Ferries at Anshan (on the Yalu River) were being reserved for military use. Maps of Korea were being ordered in large quantities. On 7 November, in voice communications intercepted and published by the COMINT community, [REDACTED] in Beijing stated, "We are already at war here."

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Douglas MacArthur with President Truman on Wake Island, 1951

That was not news to the ROK army. On 25 October a ROK division had been badly mauled by elements of the Chinese 40th Army, already reported by AFSA to be close to Korea. Five days later MacArthur's chief of staff, Lieutenant General Ned Almond, reported that he had seen Chinese POWs being held by a ROK unit. On the first of November, a Chinese force attacked a U.S. unit for the first time. But Charles Willoughby, MacArthur's G2, preferred to believe that these encounters represented isolated PRC volunteers rather than division-strength regular army units confronting UN troops.

AFSA reports continued to document the presence of major Chinese forces on the Yalu, but the reporting was subtle. AFSA was regarded as a collection and processing agency, not as a producer of intelligence. There were no dramatic wrap-ups, no peppery conclusions – just the facts, strung through a flood of intelligence reports. The COMINT community had almost the only hard information about the status of Chinese forces.

Intelligence agencies were beginning to pay attention. The Watch Committee of the JIIC, which began noting Chinese troop movements as early as June, concluded by September (probably on the basis of AFSA reporting) that these troops were moving north rather than to the coastal provinces near Formosa. By mid-October, influenced perhaps by MacArthur's opinions, the Watch Committee had concluded that, though there was convincing evidence that startling numbers of Chinese forces were in Manchuria, the time for intervention had passed – they assessed that the Chinese would not intervene.

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However, encounters with Chinese ground and air forces in late October and early November caused the committee to take another look. Admiral Arleigh Burke, who commanded naval forces in the region, was convinced that Chinese intervention was imminent and brought up the subject twice to Willoughby, who summoned his very large staff to try to dissuade Burke.

MacArthur continued to press ahead with offensive operations to reach the Yalu and get the boys home by Christmas. But on the snapping cold night of 25 November with trumpets braying, thousands of Chinese soldiers fell on unsuspecting units of the 8th Army. The American offensive turned quickly into a defensive, and a defense into a rout. The American and ROK armies were overwhelmed, and some units were virtually wiped out. Weeks later the front stabilized near Seoul, and the war settled down to grim trench warfare for almost three more years.

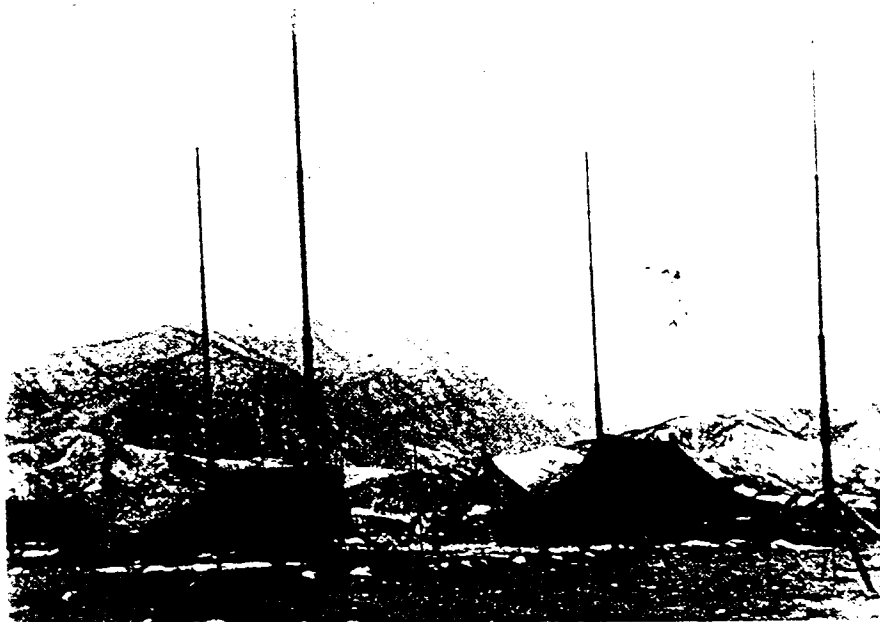
AFSS and ASA Operations

AFSS operations in Korea continued their harrowing path. The decision in November to send regular AFSS units occurred just prior to the Chinese invasion. Two locations were envisioned: one in Sinanju to intercept North Korean targets in the battle zone and a rear detachment in Pyongyang to intercept related Soviet and Chinese communications. But even as the two detachments were in the air on their way to Korea on 28 November, the Chinese had attacked, and Sinanju was not safe. The unit destined for Sinanju was diverted to Pyongyang, much further south, while the detachment commander was flown to Sinanju to assume command of the troops on the ground (the Cho detachment) and to get them to safety farther south. AFSS in Korea operated as Detachment Charlie of 1st RSM until 1951, when the 15th RSM was activated to control all AFSS Korean operations. The Cho group made it safely back to Allied lines, and by February of 1951 the front had stabilized just south of Seoul.

ASA tactical units dug in for the winter. ASA manual Morse intercept efforts in Korea were having very modest success. Most intercepted material was [REDACTED] providing little of tactical value. But sometime in February reports began to filter to ASA that UN front-line troops were hearing Chinese voice communications. ASAPAC (Advance) sent an investigating officer to IX Corps, and he reported that there was a good volume of spoken Chinese interceptable.

ASA already had some Chinese linguists, but what they needed to exploit this type of nonstereotyped communications was native linguists. An arrangement was made with a former Nationalist Chinese general working for the U.S. in Tokyo to begin hiring former Nationalist officers from Formosa. They were enticed to Korea by the promise of earning GS-6 pay as Department of the Army civilians, and they were to enjoy officer status while in Korea. Competition was keen, and by the summer of 1951, Chinese linguists were flocking to ASA units in Korea.

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DF operations - an ASA DF unit in the mountains of Korea

The linguists were formed into Low-Level Voice Intercept (LLVI) teams and were positioned as close to the front lines as possible. The effort was expanded to include Korean LLVI, although that part of the program got off to a slower start because of the difficulty of getting good linguists in a cleared status. Low-level voice quickly became the prime producer of COMINT in Korea, and the demand for LLVI teams overwhelmed ASA's ability to provide enough good linguists. The program expanded from one unit, to seven, to ten, and by the end of the war there were twenty-two LLVI teams, including two teams dedicated to tactical voice intercept.

In September of 1952 the 25th Infantry Division began picking up Chinese telephone communications from their tactical landline telephones. This was accidental, of course, and apparently originated from a sound detecting device normally used to indicate the approach of enemy troops. When the unit moved off line, they passed on the technique to the relieving 40th Infantry Division. The 40th improved the equipment but did no analysis. In November, an ASA liaison officer at division headquarters was notified, and ASA proceeded to develop the technique on other sectors, supporting it with LLVI teams

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consisting of either Korean or Chinese linguists, depending on which type of unit was on the other side of the line. The Americans had accidentally rediscovered a technique for gathering intelligence which had originally been developed during World War I and which had been a prime producer of tactical information. [REDACTED]

These LLVI teams were quite small, consisting only of an ASA officer, a couple of enlisted men for analysis, and two or three native linguists. Their value to front-line commanders, however, far outran their cost, and LLVI was hailed as one of the most important producers of tactical intelligence during the war.

White Horse Mountain

As the conflict settled down to unremitting trench warfare, highlights were few, and peace talks gradually replaced warfare in American newspapers. But the front lines continued to shift imperceptibly as the two sides bludgeoned each other in a series of bloody encounters to take high ground. One of those, the battle for White Horse Mountain, illustrated the use of COMINT in a tactical situation.

The action was originally tipped off by [REDACTED] a Chinese Communist military message that was in the hands of the tactical commander before the battle took place. ASA set up a special [REDACTED] effort and [REDACTED] to report information that might bear on the battle. [REDACTED]

True to the intelligence prediction, the Chinese launched a massive infantry assault on American and ROK troops at White Horse on 6 October and persisted until 15 October. Throughout the battle, LLVI teams kept the American commander informed of the position and activities of Chinese units. In a precursor to Vietnam, the American units were able to call artillery fire on Chinese positions on the basis of the LLVI-provided information. The Chinese suffered nearly 10,000 casualties out of some 23,000 committed to the battle.

AFSS Introduces Tactical Warning

Like ASA units, AFSS operations in Korea depended increasingly on intercept of low-level voice communications, using this for tactical warning. The concept relied on the Joint Training Directive for Air-Ground Operations published in 1949, which stated that the primary purpose of radio squadrons mobile for tactical support was to collocate with the Tactical Air Control Center (TACC) so that direct tactical warning could be supplied. (This followed World War II COMINT doctrine used effectively by Lieutenant General Kenney at 5th Air Force.)

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Because of the lack of linguists, AFSS was slow to set up this service in Korea. However, in the early spring of 1951 AFSS units began intercepting Soviet ground-controlled intercept (GCI) communications, and this spurred Far East Air Force (FEAF) into requesting AFSS tactical support. Fortunately, AFSS did have some Russian linguists, and eight of them were on their way to Korea in April to form the first linguist team. They originally set up a mobile intercept and processing hut at Pyongtaek in central Korea, and communicated with the TACC by landline. No one in the tactical air operation was cleared for COMINT, so it was disguised using a simple substitution code to identify enemy aircraft and ground checkpoints. Arrangements were made for the TACC controller to pass relevant COMINT, intermixed with radar plots, to fighter pilots. The operation was nicknamed "YOKE," and became highly successful because it significantly expanded the range of control of the TACC and improved the air controllers' ability to warn pilots of impending threats.

As the front advanced north of Seoul, so did the air control operations. In June of 1951, the entire air control operation moved forward to a hill four miles northeast of Kimpo Airport near Seoul. But in August hearability deteriorated, and the operation, including the TACC and Security Service operations, migrated by LST to Pyong-Yong-Do Island. Only six miles from enemy lines, "P-Y-Do" (as it was called) was in an ideal location. The site at Kimpo was kept open, and linguists were split between the two sites.

Soon AFSS was finding tactical voice communications in Chinese and Korean as well as Russian. Two more voice teams were established for the additional languages. The Korean voice team consisted of the Cho contingent of the Nichols group. The Chinese team set up shop on the campus of Chosen Christian College in Seoul (today, Yansei University). AFSS acquired its Chinese linguists in Korea basically the same way that ASA did - they hired foreign-born linguists. In this case, they did business with one General Hirota, a former chief of the Japanese army COMINT agency during World War II. Hirota hired twelve Japanese linguists who were fluent in Chinese.

With so many languages involved, the tactical support operation was unusually complex. The AFSS facility at Kimpo correlated Chinese early warning voice, Chinese GCI voice, Soviet GCI voice, Chinese air defense Morse and Korean GCI voice. Each input was produced by a separate team, and each team was in a different location for security purposes.

In September of 1951 the P-Y-Do operation was closed down and moved back to Kimpo, and that fall all AFSS operations were consolidated at Chosen Christian. This was the first time that all components of the operation were collocated, which made correlation of activity easier. According to one officer involved in the operation, "the present top-heavy success of the F-86s against MIG-15s dates almost from the day of the inception of the new integrated voice-CW-YOKE service."

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In early 1952 much of the GCI traffic that AFSS had been intercepting began to dry up, and AFSS became convinced that it had gone to VHF. Moreover, about that time the Chinese stopped tracking Communist aircraft, and they tracked only "hostiles." These twin changes spelled potential disaster for AFSS tactical operations. From a practical standpoint, the lack of tracking would force AFSS to rely almost entirely on intercepting GCI communications. But since these communications were disappearing, probably to VHF, that source of information was also drying up. The changes also generated a security problem, since the positions of Communist aircraft had been disguised as radar plots when being passed to the TACC. If there were no more radar position reports, disguise of the origin of the information would be much more difficult.



Delmar Lang on Cho-Do Island in 1952

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These developments roughly coincided with the arrival of the first batch of school-trained American Chinese linguists, headed by Lieutenant Delmar "Del" Lang, in mid-1952. At the time the unit was located in Seoul, where VHF intercept was hardly possible, while the TACC had moved to Cho-Do Island, near the North Korean harbor of Wonsan. Information had to be relayed from the AFSS unit to Kimpo and from Kimpo to Cho-Do. Lang moved the operation to Cho-Do Island and collocated it with the TACC. Tests on Cho-Do in August of 1952 confirmed that both the Soviets and Chinese were now using VHF for their GCI control activities.

To solve the security problems and to make sure that the TACC controller got the best possible support, Lang positioned an AFSS linguist in the TACC in March of 1953, sitting next to the controller. The linguist had a field phone on his desk, the other end of which was attached to the output of a receiver at the Security Service intercept unit three-fourths of a mile away. In an era when no one knew much about TEMPEST [REDACTED] such a wireline was regarded as secure simply because it was a landline. [REDACTED]

Combined with improved hearability, the new lash-up at Cho-Do Island provided the best support that AFSS mustered during the entire war. In one day, which Lang described as the "great Korean turkey shoot," American F-36s downed fifteen MIGs without a loss, even though none of the MIGs was ever seen on radar. The information came, of course, from the COMINT operation at Cho-Do. A visiting ASA colonel commented that "it was just like shooting ducks in a rain barrel." It was a model for tactical COMINT operations and was resurrected by the same Del Lang years later in Vietnam. [REDACTED]

The Navy

Naval cryptology was a bit player in Korea. The DPRK had no blue-water navy, and it was so weak that the Inchon invasion went unopposed from the naval standpoint. The naval COMINT unit in the region was [REDACTED]. But [REDACTED] was not concerned with the small collection of DPRK coastal patrol craft. The organization concentrated instead almost entirely on the Soviet navy in the Pacific, to determine what moves, if any, the Soviets would make toward the U.S. presence on the Korean peninsula.

The unit was housed in cramped quarters in a former Japanese artillery training school, entirely too small and inadequate for the purpose. NSG found an old Japanese ammunition storage building about ten miles from [REDACTED]. Rehabilitation began in 1951, and in November 1952 [REDACTED] moved to [REDACTED] where it remained for many years.

Most of the NSG support to the war effort came from its afloat detachments. Originating out of Hawaii, detachments were placed aboard 7th Fleet vessels beginning in August 1951, and at the end of the war, 7th Fleet had three such units. [REDACTED]

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The AFSA Factor

On the home front, AFSA provided significant help to battlefield commanders. AFSA's quick work [REDACTED] in time to turn the tide at Taegu appeared to portend the same kind of COMINT effectiveness that the U.S. had enjoyed during World War II. But it was not to be. [REDACTED]

In November 1950, with Chinese Communist troops flooding into North Korea, AFSA turned its attention to Chinese communications. [REDACTED]

In 1952 the painfully slow progress on traffic analysis of Chinese army nets finally began to bear fruit. There were indications through traffic analysis that the 46th Army was moving northward. The army eventually arrived in Manchuria and crossed the border into Korea. As it did so, AFSA began exploiting People's Volunteer Army (PVA) nets from a traffic analytic standpoint, and it achieved a level of competence on PVA nets that allowed extremely accurate order of battle determinations, unavailable through any other intelligence source. Through traffic analysis AFSA noted the build-up of PVA units on the eastern front, and this allowed 8th Army to reinforce its right side prior to a major PVA assault on 15 July 1953.

Relations with ROK COMSEC and COMINT

COMSEC assistance to ROK forces began almost as early as COMINT collaboration. In September 1950 ASA was asked to furnish low-level cryptographic assistance for use by the ROK army. After conferring with AFSA, ASA shipped some strip ciphers and Playfair squares. It was soon found, however, that these very time-intensive systems would not be fast enough, and in 1953 ASA provided the first electromechanical cipher equipment, the BACCHUS system. Later in the year ASA also released the DIANA [REDACTED] system.

Cryptologic cooperation with the ROK COMINT organizations continued throughout the war. USAFSS continued its relationship with the Cho group, while ASA continued to do business with the Kim group. In November 1951 ASAPAC proposed the consolidation

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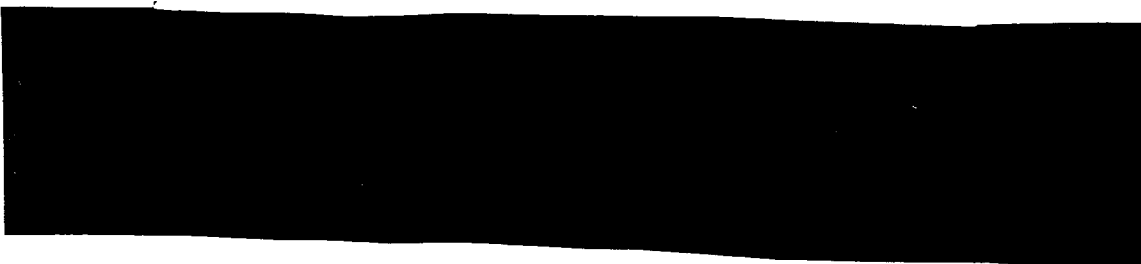
of the two efforts, but AFSS firmly rejected the overture. This was probably based on Air Force fear that ASA would dominate the relationship and get back into the business of copying North Korean air targets, but this may also have been based on the very realistic appraisal that the animosity between Kim and Cho was unbridgeable. [REDACTED]

The situation continued unchanged, [REDACTED]

By charter (NSCID 5), CIA had control of all foreign intelligence relationships. But the "battlefield marriage" between the American and South Korean COMINT organizations represented a significant exception to the general rule. Korea was JCS turf, and military commanders were cool to CIA participation in their arena.

[REDACTED]

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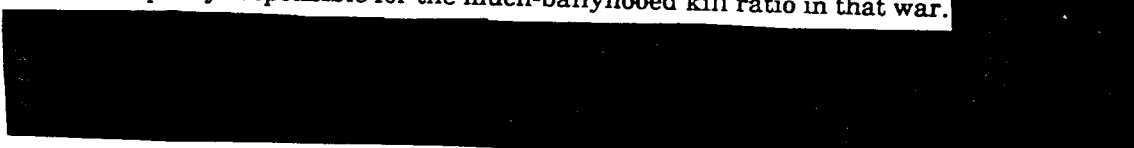
Korea - An Assessment

The Korean War occurred during a period of struggle in the cryptologic community. It began a year after the formation of AFSA and concluded after the AFSA ship had been finally scuttled in favor of a new vessel, the National Security Agency. The demands of war highlighted the fissures in the structure, and those fissures in turn made prosecution of the war more difficult. AFSA wrestled with the SCAs over control of intercept positions and targets throughout its existence, and many of those battles were related to the war effort. The Brownell Committee was convened in part because of complaints by organizations outside the Department of Defense over degraded cryptologic support resulting from the war. The committee stressed in its final report that the cryptologic community had been shown deficient in its effort during the war. NSA replaced AFSA partly because of what was happening (or not happening) in Korea.

But after forty years the picture does not look quite so bleak. Actually, AFSA and the SCAs provided good support to the war effort. Although AFSA (along with everyone else) was looking the other way when the war started, it did a remarkable about-face, ~~and~~

~~its accomplishments during the battle for the Pusan perimeter, and~~ Its accomplishments during the battle for the Pusan perimeter, and ~~using the~~ using the information to support tactical commanders, were considerable and important. The reporting program, although hampered by restrictions on AFSA's production of "intelligence" as opposed to "intelligence information," was farsighted and effective. AFSA, almost alone among intelligence agencies, foresaw the Chinese intervention. The development of Chinese and Korean order of battle owed much to AFSA's high-powered traffic analytic effort.

After a slow start occasioned by lack of mobility, tactical resources, linguists, and working aids, ASA and USAFSS put together highly credible battlefield COMINT organizations. ASA's LLVI program produced more valuable information for ground commanders than any other source. AFSS put together a system for warning fighter pilots which was partly responsible for the much-ballyhooed kill ratio in that war. ~~and~~



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[REDACTED]

AFSA's quick start was not sustained. Beginning in July of 1951, the North Koreans began a total changeover of their communications procedures

[REDACTED]

The new North Korean security measures were evidently inspired by the Soviet Union, whose communications had in 1948 undergone a similar transformation in the face of possible American and British exploitation efforts. [REDACTED] It was accompanied by a decline in North Korean radio messages incident to the beginnings of static trench warfare roughly at the 38th Parallel, which gave the enemy a chance to divert radio communications to landline.

[REDACTED]

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[REDACTED]

Security was a problem in Korea, as it has been during all wars. Occasional press releases exposed COMINT support to battlefield commanders. The release of information about AFSS exploitation of GCI communications became so serious that in October 1951 Detachment 3 of 1st RSM took the extraordinary step of suspending operations for a few days until they got the attention of key officers in 5th Air Force. The employment of tactical GCI voice and tracking information in the air war caused AFSS to devise new measures to cover the information, and it set a precedent for use of similar information during the war in Vietnam.

When NSA was created in November 1952, immediate steps were taken to sort out the effort in Korea. NSA's recommendations amounted to a classic "lessons learned" about war. Most pressing was a program which would allow the use of indigenous personnel with native language capability. Almost as urgent was the need to sort out the tangled relationships with the various ROK COMINT efforts. It would also be necessary to increase NSA representation in the field and to expand existing field offices with technical experts assisting the SCAs. Finally there was a call to develop new special identification techniques that would allow NSA and the SCAs to track target transmitters. NSA sponsored these themes for years, until they became tantamount to COMINT doctrine on warfighting.

One beneficial effect of the Korean conflict was to begin a rapid rise in cryptologic resources. In July 1950 USCIB recommended to the National Security Council that COMINT receive a hiring jolt. The NSC approved this on 27 July in a meeting attended by the president himself.

Korea was America's first stalemated war, and recriminations resounded for years later. But even an acerbic CIA critic of the cryptologic community had to admit that "COMINT remained the principal source of intelligence for threat until 27 July 1953, when the armistice was signed at Panmunjom."

[REDACTED]

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